CLAIMS:

1. An endoscopic imaging apparatus comprising:
an endoscope including a distal end;
at least one ultrasound transducer contained within said distal end; and
a covering fabricated from an electrically insulating material having a Thermal Conductance greater than 1 W/M-°K overlaying at least a portion of said distal end.

2. The endoscopic imaging apparatus as in Claim 1, further comprising:
controls for controlling the movement of the distal end;
a signal processor for processing received signals from said at least one ultrasound transducer; and
means for energizing the at least one ultrasonic transducer.

3. The apparatus as in Claim 1, wherein said covering is in thermal contact with the at least one ultrasound transducer.

4. The apparatus as in Claim 1, wherein said material is non-toxic.

5. The apparatus as in Claim 1, wherein said material is non-reactive in the presence of bodily fluids.

6. The apparatus as in Claim 1, wherein said material is selected from the group consisting of ceramic and diamond-coated copper.

7. The apparatus as in Claim 6, wherein the ceramic is an Alumina-based ceramic.

8. The apparatus as in Claim 1, wherein said material has a Thermal Conductance of approximately 30 W/M-°K.

9. An apparatus for dissipating thermal energy produced by an endoscopic imaging apparatus, wherein the apparatus is configured and dimensioned to mate with a distal end of said imaging apparatus for dissipating thermal energy produced at said distal end, said

apparatus fabricated from an electrically insulating material having a Thermal Conductance greater than 1 W/M-°K.

10. The apparatus as in Claim 9, wherein said material is selected from the group consisting of ceramic and diamond-coated copper.

11. The apparatus as in Claim 10, wherein the ceramic is an Alumina-based ceramic.

12. The apparatus as in Claim 9, wherein said material is non-toxic when in contact with a patient's internal structures.

13. The apparatus as in Claim 9, wherein said material is non-reactive in the presence of bodily fluids.

14. The apparatus as in Claim 9, wherein said material has a Thermal Conductance of approximately 30 W/M-°K.

15. A method for scanning a patient's heart using a TEE probe comprising of the steps of: providing an endoscope having a distal end having a portion thereof fabricated from an electrically insulating material having a Thermal Conductance greater than 1 W/M-°K; and guiding the endoscope including a distal end.

16. The method as in Claim 15, wherein said material is non-toxic.

17. The method as in Claim 15, wherein said material is non-reactive in the presence of bodily fluids.

18. The method as in Claim 15, wherein said material is selected from the group consisting of ceramic and diamond-coated Copper.

19. The method as in Claim 15, wherein the ceramic is an Alumina-based ceramic.

20. The method as in Claim 15, wherein said material has a Thermal Conductance of approximately 30 W/M-°K.

21. A device for passively dissipating thermal energy produced by at least one transducer located at a distal end of an endoscopic imaging apparatus, wherein said device is configured and dimensioned to encase the at least one transducer, said device having at least the following properties:
electrically insulating;
a Thermal Conductance greater than 1 W/M-°K; and
substantially non-reactivity in the presence of bodily fluids.